### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023368

Address: 333 Burma Road **Date Inspected:** 19-May-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Shen Fu Yoo **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Trial Assembly

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Segments Assembly Area(Open Yard)

This QA performed Dimensional Inspection as per Dimension Control Plan (DCP) for U-Ribs 39 Nos. for 3BE and 4AE generated a report for East side segments.

This QA performed Dimensional Inspection for Longitudinal Diaphragm for West side and generated a report for the following segments.

2AW+2BW

3AW+3BW

4AW+4BW

**BAY 14** 

# WELDING INSPECTION REPORT

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Orthotropic Box Girder (OBG)

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc (SMAW) for FL3 Panel. The weld joint no. SEG031B-024 is in progress. The welder is identified as 058242. Welder was welding in 4G (Overhead) position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b-FCM.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Panel between SP 545A to SP 585A for Segment 9CE. The weld joint no. SEG054A-002 is in progress. The welder is identified as 044755. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-L2C-S-2.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Panel between SP 584A to SP 628A for Segment 9EE. The weld joint no. SEG058A-003 is in progress. The welder is identified as 050988 and 208035. Welder was welding in 1G (Flat) position. In-process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-L2C-S-2.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) with for Deck Panel to Corner Assembly for Segment 6AW. The weld joint no. SEG 027\*-031is in progress. The welder is identified as 045265. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-L2C-S-2.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Deck Plate Diaphragm Floor Beam for Segment 6BW. The weld joint no. SSD9-PP43-004 is in progress. Welder is identified as 045209 and 045260. Welder was welding CJP in 2G (Horizontal) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U4b-F.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Deck Plate Diaphragm Floor Beam for Segment 6AW. The weld joint no. SSD12-PP40-003 is in progress. Welder is identified as 045203. Welder was welding CJP in 2G (Horizontal) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U4b-F.

The designated ZPMC CWI for the West Line is Mr. Shen Fu Yoo and QC Mr. Li Ming Yang, Mr. Liu Wan Ning and Mr. Liu Rudan for Bay 14.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for

# WELDING INSPECTION REPORT

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your project.

**Inspected By:** Math, Manjunath Quality Assurance Inspector

**Reviewed By:** Miller,Mark QA Reviewer